

S/td

51

~~CONFIDENTIAL~~

ANNEX TO

COCOM Doc. No. 3416.61/1

NOTES ON ALLOYS WHICH WOULD BE EXCLUDED FROM THE DEFINITION
OF ITEM 1661(b) UNDER THE UNITED KINGDOM PROPOSAL
(page 7 of Appendix to COCOM Document No. 3016.00/4)

S. General

Submitted by the United States Delegation on the 12th February 1959.

Incoloy, produced by International Nickel Company, has the following analysis: nickel - 32%, chromium - 20.5%, manganese - 1%, balance iron. Incoloy is the base for many high temperature alloys, such as Inconel, Nimonic 75, Incoloy "T", Incoloy 901, Incoloy "X". The addition of 1% titanium to Incoloy alloy results in a modest increase in rupture and creep strength.

Nimonic alloys, produced by Henry Wiggins, Ltd. (UK), a subsidiary of International Nickel Company, are comparable to inconel and incoloy alloys.

Nimonic, incoloy, and inconel are currently used for stator blades, turbine rotor blades and buckets, turbine wheel discs, after-burner liners and shells, turbine frames, and turbine casings.

Nimonic 75 is currently being used for combustion liners, after-burner shells, tail cones, etc., in jet engine applications.

Nimonic D 5 is not currently used, but it can be used in jet applications up to about 1900 degrees F.

NA-22H is primarily a furnace alloy not presently used in jet applications, but is a high temperature alloy capable of military use.

~~CONFIDENTIAL~~